

ABSTRACT OF THE DISCLOSURE

An electrostatic chuck is provided which includes a circular ceramic plate having an electrostatic attractive electrode, a mounting surface for supporting a wafer which is formed on one of the main surfaces of the circular ceramic plate, an annular gas groove formed on the periphery of the mounting surface in the form of concentric circles with a gas inlet communicating with the annular gas groove, and a circular gas recess formed inside the ceramic plate and surrounded by the annular gas groove with a gas inlet communicating with the circular gas recess, wherein the annular gas groove and the circular gas recess are independently separated from each other by an annular rib protrusion, with a plurality of dotted protrusions being formed within both the annular gas groove and the circular gas recess.

This arrangement makes it possible to achieve a smaller in-plane temperature difference on the wafer placed on the mounting surface of the electrostatic chuck and a shorter saturating time into a predetermined constant temperature.